

What is claimed is:

Sub A<sup>3</sup> 1. A socket contact for mating with a pin contact, said socket contact  
2 comprising:  
3 an electrical component-attaching section integrally formed with a  
4 receptacle section, the receptacle section forming a bore for receiving the pin  
5 contact, the receptacle section having a conductive element in the bore having a  
6 contact portion for contacting the pin contact, an arc-arresting end portion with  
7 an opening therein which opens into the bore and has a diameter smaller than  
8 an outer diameter of the pin contact for initially engaging the pin contact and  
9 establishing an electrical connection between the pin contact and the socket  
10 contact whereby the mandatory engagement and resulting electrical connection  
11 between the pin contact and the arc-arresting end portion precludes deleterious  
12 electrical arcing between the pin contact and the conductive element, and  
13 expansion means for permitting the opening to expand as the pin passes  
14 therethrough into the bore.

1 2. The socket contact of Claim 1 wherein the expansion means  
2 comprises at least one slot in the receptacle section.

1 4. The socket contact of Claim 1 wherein the expansion means  
2 comprises a plurality of slots in the receptacle section.

1 5. The socket contact of Claim 3 wherein the end portion has a  
2 bevelled surface extending radially outwardly and in a first direction for causing  
3 the opening therein to expand when the pin contact is inserted into the opening.

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1 ~~6~~ 5. The socket contact of Claim 1 wherein the conductive element  
2 comprises a strip of spring contacts of conductive material mounted  
3 substantially around an inner wall of the bore.

1 ~~7~~ 6. The socket contact of Claim 5 wherein the strip comprises a  
2 plurality of spaced apart cross members with a segment along their length  
3 having a reduced width.

1 ~~3~~ 7. The socket contact of Claim 1 further comprising an electrical  
2 connector housing portion having a receptacle therein, the receptacle section of  
3 the socket contact being disposed in the receptacle.

Sub A4 D 8. An electrical socket contact for mating with a pin contact in an  
2 electrical connector, said socket contact comprising:  
3 an electrical component-attaching end;  
4 an elastically expandable cylindrical section opposite of and integral with  
5 the electrical component-attaching end, the elastically expandable cylindrical  
6 section having a cavity therethrough for receiving the pin contact and an  
7 opening with a diameter smaller than an outer diameter of the pin contact  
8 whereby when the pin contact is inserted through the opening into the cavity an  
9 electrical connection is initially made between the pin contact and the  
10 cylindrical section in an area adjacent to the opening; and  
11 a strip of spring contacts of conductive material located in the cavity of  
12 the elastically expandable cylindrical section.

1 CM 9. The socket contact of Claim 8 wherein the elastically expandable  
2 cylindrical section comprises at least one slot extending along at least a portion  
3 of the length of the elastically expandable cylindrical section from the opening.

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1        10.    The socket contact of ~~Claim~~ 8 wherein the elastically expandable  
2 cylindrical section comprises a plurality of slots extending along at least a  
3 portion of the length of the elastically expandable cylindrical section from the  
4 opening.

1        11.    The socket contact of ~~Claim~~ 8 wherein the strip comprises a  
2 plurality of spaced apart cross members with a segment along their length  
3 having a reduced width.

1        12.    The socket contact of ~~Claim~~ 8 further comprising an electrical  
2 connector housing portion having a receptacle therein, the elastically expandable  
3 cylindrical section being disposed in the receptacle.

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